CHAPTER 7.0: WATER PROJECTS AND PROGRAMS

7.1 PLANNED WATER SUPPLY PROJECTS

Possible future sources of water supply include additional groundwater production, new treated or raw water connections to Metropolitan, and recycled water. YLWD has already started to develop some facilities that will provide additional groundwater and imported water supplies. The following subsections describe additional actions YLWD has taken towards investigating additional sources of supply, as well as regional issues that may impact future supplies of groundwater and imported water.

7.1.1 Groundwater

During the past 20 years, YLWD has investigated several new groundwater well options to increase the supply of groundwater available for YLWD's system. YLWD has considered developing water wells owned by the Texaco Oil Company, the Etchandy family, the Eastlake Village Homeowners Association, and in the area generally north of Yorba Linda Boulevard and east of Ohio Street. However, YLWD discarded these options after studies revealed water quality problems or production volumes that would be too low for economical operation.

The Orange County Groundwater Storage Project provides some potential for participating agencies, including YLWD, to use additional groundwater supplies. This project would allow participating agencies to store excess surface water in the groundwater basin when it is available and use more groundwater during shortages of imported surface water. The construction of a new domestic water well at YLWD's Richfield Plant, Well No. 19, is currently under construction as part of this project.

In April 2001, Metropolitan selected the groundwater storage project, which was proposed by OCWD and MWDOC, for funding consideration under Proposition 13 Funds. The groundwater storage project calls for 60,000 acre feet of excess Metropolitan surface water supplies to be delivered by Metropolitan through existing connections and stored in the Orange County Basin, when available, during normal and wet years. When called on by Metropolitan during dry-year shortages of imported water, the Orange County groundwater producers participating in the groundwater storage project could extract up to an additional 20,000 AFY of groundwater from the basin. This additional groundwater production would decrease, by an equivalent amount, the demand for Metropolitan firm deliveries, thereby making additional Metropolitan firm deliveries available to the region. On October 5, 2001, YLWD declared interest in participating in the groundwater storage project through a written response to OCWD's request for interested participants.

7.1.2 Imported Water

In 1990, several agencies in southern Orange County requested additional imported water supply to meet their service area needs. To meet these projected demands, as well as increasing demands in all of Southern California, Metropolitan proposed to construct the Central Pool Augmentation Project. This project consists of a pipeline from Lake Matthew's, tunneled through the mountains, and terminating near Lake Forest. The environmental studies are currently underway. Completion of the project is scheduled for 2010. Construction has not started yet, so this date will most likely slip to later than 2010.

In the interim, MWDOC proposed expansion of the AMP capacity to meet increased water demands until the Central Pool Augmentation Project is finished. MWDOC's proposal, known as the Flow Augmentation Project, includes the installation of a parallel pipeline in south Orange County, and the construction of a future booster station at the Diemer Filtration Plant. AMP participants were offered the opportunity to purchase additional capacity in the Flow Augmentation Project. YLWD chose not to buy more capacity and, in fact, sold 20 cfs of its capacity in the AMP.

7.1.3 Untreated Raw Water

Metropolitan's Lower Feeder is an untreated water pipeline that traverses across the northern portion of YLWD's service area. The Black Gold Golf Course is currently supplied untreated water through the OC-36 turnout off the Lower Feeder. There are no current plans to deliver untreated water to any other sites for irrigation YLWD's service area.

7.1.4 Desalinated Water

Since YLWD does not have local sources requiring desalination, the use of desalinated water would require the construction of extensive pipelines and treatment facilities. At this time, desalination of water is not considered an economical means of generating an additional water supply by YLWD.

7.1.5 Recycled Water

Current treatment technology and economics indicate that wastewater reclamation is more efficicent when administered regionally by agencies such as the Orange County Sanitation District (OCSD) and OCWD. In 1993 YLWD's Board of Directors reviewed a report on a proposed wastewater treatment plant near the Yorba Linda Lakebed. The report concluded that it was not cost–effective to construct and operate a wastewater treatment plant at this site at this

time. A wastewater treatment plant was studied for the Shell Development project but was dropped for environmental reasons.

In April 2001 the OCSD and OCWD approved a plan to construct the GWR System project, which will treat wastewater from OCSD's Fountain Valley plant. Once completed, the GWR System project will bring recycled wastewater from Fountain Valley to the Santa Ana River lakes area for recharge into the under ground aquifer. Currently, it is not economical to treat and pump reclaimed water from these advanced treatment plants to the YLWD. The use of wastewater by downstream agencies, however, allows reallocation of potable water to local agencies that cannot directly take advantage of reclaimed water use.

For detailed information on recycled water use in Orange County and wastewater reclamation, please refer the Plans adopted by MWDOC and Metropolitan.